

# United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/590,496	06/09/2000	Stephen M. Lipka	NAO-0001	2489
7.	590 12/03/2003		EXAMINER	
CANTOR COLBURN LLP 55 Griffin Road South			HA, NGUYEN T	
Bloomfield, C			ART UNIT PAPER NUMBER	
	•		2831	

DATE MAILED: 12/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

			RE				
	Application No.	Applicant(s)					
	09/590,496	LIPKA ET AL.					
Office Action Summary	Examiner	Art Unit					
	Nguyen T Ha	2831					
The MAILING DATE of this communication			:s				
Period for Reply			:				
A SHORTENED STATUTORY PERIOD FO THE MAILING DATE OF THIS COMMUNIC - Extensions of time may be available under the provisions of after SIX (6) MONTHS from the mailing date of this commu- - If the period for reply specified above is less than thirty (30) - If NO period for reply is specified above, the maximum stat - Failure to reply within the set or extended period for reply w - Any reply received by the Office later than three months aft earned patent term adjustment. See 37 CFR 1.704(b).	CATION.  of 37 CFR 1.136 (a). In no event, however, may unication.  of days, a reply within the statutory minimum of to tutory period will apply and will expire SIX (6) Mixill, by statute, cause the application to become	v a reply be timely filed  hirty (30) days will be considered timely.  ONTHS from the mailing date of this commit  ABANDONED (35 U.S.C. § 133).	unication.				
1) Responsive to communication(s) file	Responsive to communication(s) filed on <u>15 September 2003</u> .						
2a) ☐ This action is <b>FINAL</b> . 2b) ☑ This action is non-final.							
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Disposition of Claims							
4)⊠ Claim(s) 1-24 is/are pending in the a	pplication.						
4a) Of the above claim(s) is/are	e withdrawn from consideration.						
5)⊠ Claim(s) <u>1-20</u> is/are allowed.							
6)⊠ Claim(s) <u>21-24</u> is/are rejected.							
7) Claim(s) is/are objected to.							
8) Claims are subject to restricti	ion and/or election requirement.	•					
Application Papers							
9) The specification is objected to by the Examiner.							
10) The drawing(s) filed on is/are objected to by the Examiner.							
11)☐ The proposed drawing correction filed on is: a)☐ approved b)☐ disapproved.							
12) The oath or declaration is objected to	by the Examiner.						
Priority under 35 U.S.C. § 119							
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).							
a) ☐ All b) ☐ Some * c) ☐ None of:							
1. Certified copies of the priority of	locuments have been received.						
2. Certified copies of the priority of	locuments have been received in	Application No					
Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.							
14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).							
, <u> </u>	- p	<b>∀</b> · · · - <b>√</b> - / ·					
L							
Attachment(s)							
<ul> <li>15) Notice of References Cited (PTO-892)</li> <li>16) Notice of Draftsperson's Patent Drawing Review (P</li> <li>17) Information Disclosure Statement(s) (PTO-1449) P</li> </ul>	PTO-948) 19) 🔲 Notice	ew Summary (PTO-413) Paper No(s). of Informal Patent Application (PTO-1					

U.S. Patent and Trademark Office PTO-326 (Rev. 01-01) Application/Control Number: 09/590,496 Page 2

Art Unit: 2831

#### **DETAILED ACTION**

### Response to Arguments

1. Applicant's arguments, filed 9/15/2003, with respect to claims 21-24 have been fully considered and are persuasive. The previous of the office action has been withdrawn.

## Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 3. Claims 21-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Sasaki et al. (US 5,279,910).

Regarding claim 21, Sasaki et al. disclose an asymmetric supercapacitor/battery (figure 1) comprising:

- a positive electrode (1) comprising a current collector (2) and manganese dioxide (column 6, lines 24-29);
- a negative electrode (4) comprising carbonaceous active material (column 4, lines 59-65);
- an aqueous electrolyte solution (column 6, line 34); and separator (3). Regarding claim 22, Sasaki et al. disclose the carbonaceous active material being pseudo-graphite structure/nanofiber (column 4, line 52-53).

Application/Control Number: 09/590,496 Page 3

Art Unit: 2831

# Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 23&24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sasaki et al (US 5,279,910) in view of Xiao et al (US 6,162,530).

Regarding claims 23&24, the teaching of Sasaki and Takami include all the limitations discussed above with respect to claims 21 and 22, except for the manganese dioxide being nanostructured.

Xiao et al. teach a manganese dioxide being nanostructured (column 5, lines 48-50).

Application/Control Number: 09/590,496

Art Unit: 2831

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the Xiao manganese dioxide into Sasaki in order to facilitate intercalation of the conductive for the device.

Page 4

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nguyen T Ha whose telephone number is 703-308-6023. The examiner can normally be reached on Monday-Friday from 8:30Am to 6:00 Pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on 703-308-3682. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3432 for regular communications and 703-305-3431 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

NH

December 1, 2003